

Serial No.: 10/737,137  
Art Unit: 2617

### REMARKS

Claims 1, 3-22, and 24-27 are currently pending. Claims 2 and 23 have been cancelled. Claims 1, 10, 12, 22, 26, and 27 have been cancelled. Claims 1 and 27 have been amended to include the subject matter of cancelled claim 2. Claim 22 has been amended to include the subject matter of cancelled claim 23. Claims 10 and 26 have been amended for clarification purposes. Claim 12 has been rewritten as an independent claim incorporating the subject matter of base claim 1. It is respectfully submitted that no new matter has been added.

The Patent Office has objected to the specification for missing a header at the beginning of the detailed description section. Although the PTO guidelines for the arrangement of the specification are not mandatory, Applicant has complied with the PTO's request and added a header to the detailed description section.

The Patent Office rejected claims 10 and 26 under 35 U.S.C. 112, second paragraph, for using the phrase "such as." This phrase has been deleted from the claims. It is respectfully requested that the Patent Office withdraw its rejection of these claims.

The Patent Office has rejected claims 1, 3, 4, 8, 13 to 15, 21 to 23 and 27 as obvious in view of combination of US 2002/0062547 (Chiodo et al) and US 6,876,543 (Mockridge et al). The Patent Office also alleges that claims 2, 5 to 7 and 16 to 20 are obvious in view of Chiodo, Mockridge and US 2004/0074069 (Browne et al), that claims 9 to 10, 24 and 25 are obvious in view of Chiodo, Mockridge and Staniszewski (US 2004/0075581) and that claims 11 and 26 are obvious in view of Chiodo, Mockridge, Staniszewski and JP 11039053 (Matsunaga).

US 2002/0062547 (Chiodo et al) discloses using 'shape memory material' to assist in the disassembly of an article. The shape memory material may be a metal alloy (e.g. Zn-Cu-Al) or a plastic/polymer (e.g. polyurethanes). In one embodiment (see Figs. 3A and 3B), the shape memory material is a liner 38 that is arranged to receive a screw 34. When the liner 38 is below a predetermined transition temperature, it retains the screw 34. However, if the liner 38 is heated above its transition temperature, it expands and no longer retains the screw 34. The screw 34 may then be removed from the liner 38 with little force.

In another embodiment (see Fig. 1), the shape memory material is a coil 16 that is connected to a front shell 10a and to a rear shell 10b. If the coil 16 is heated above its transition

Serial No.: 10/737,137  
Art Unit: 2617

temperature, it expands and overcomes the snap fit connection (lug 12 and rim 14) thereby forcing apart the front shell 10a and the rear shell 10b.

In another embodiment (see Fig. 10), the shape memory material appears to receive an electrical current that heats it up and thereby raises its temperature above a predetermined transition temperature.

US 6,876,543 (Mockridge) discloses how a front housing 12, endoskeleton 16 and rear housing 14 may be assembled to form a mobile telephone 10. Initially, the endoskeleton 16 is attached to the front housing 12. As mentioned on col. 3, lines 34 to 37, the endoskeleton 16 has a plurality of recesses which are received and engaged by a plurality of corresponding ribs on the front housing 12. Once the front housing 12 is attached to the endoskeleton 16, the rear housing 14 is then attached to the front housing 12. The front housing 12 and the rear housing 14 are coupled together via hooks and latches. Additionally, at the top of the mobile telephone 10, a cantilevered arm 62 of the front housing 12 fits into a loop 64 of the rear housing 14.

US 2004/0074069 (Browne et al) discloses a releasable fastening system for providing controlled engagement between surfaces of an apparatus. With reference to the embodiment illustrated in Fig. 1, the fastening system includes a connecting block 12 and a receiving block 14 which function as electrodes. The receiving block 14 includes a plurality of cavities 22 which are arranged to receive corresponding posts 20 on the connecting block 12.

When the receiving block 14 and the connecting block 12 are brought together, they electrically connect with one another and an electrical potential is dropped across them. A polymer film 16 on the surface of the connecting block 12 (and posts 20) expands due to the voltage dropped across it and the posts 20 thereby engage the cavities 22.

In order to remove the connecting block 12 from the receiving block 14, a reversed voltage is applied between the blocks 12 & 14 so that the polymer film 16 contracts and the posts 20 no longer engage the cavities 22.

US 2004/0075581 (Staniszewski) discloses an electronic timer device 100 that is arranged to remind a user when to move his car from a parking space so that he may avoid receiving a parking ticket. As mentioned on paragraph 65, the electronic timer device 100 may function as a cell phone. The device 100 includes a cover 152 which is moveable so that in one configuration, the buttons 150 are obscured, and in another configuration, the buttons 150 are not obscured and

Serial No.: 10/737,137  
Art Unit: 2617

may be accessed by a user. The cover 152 may not cover all the buttons (e.g. security code entry buttons 156). When the cover 152 is closed, the user may have to enter a security code via security code entry buttons 156 in order to unlock the cover 152.

JP 11039053 (Matsunaga Tsutomu) appears to disclose an anti-theft system whereby a laptop receives infrared signals from an external source and if the laptop is moved so that it no longer receives infrared signals, a lock mechanism is triggered which prevents the laptop from being opened. In order to release the lock mechanism, a user must enter a password using an infrared communication remote controller 34 that corresponds to a predetermined password stored on the laptop.

As mentioned above, the Patent Office alleges that claim 2 is obvious in view of Chiodo, Mockridge and Browne. It would not be obvious to include the polymer actuators of Browne in Chiodo since Chiodo teaches using polymer actuators which are very different to the polymer actuators disclosed in Browne. Chiodo teaches that the polymer actuators change configuration at a transition temperature whereas Browne teaches that the polymer actuators change configuration upon the application of a voltage. Chiodo teaches, at great length, that such polymer actuators (shape memory material) provide advantages when disassembling products (see paragraphs 28, 30, 32 to 36). For example, Chiodo teaches that when using shape memory material, it is not necessary to know the location of each fastener in a product to disassemble it, it is only necessary to know the transition temperature of the shape memory material. In view of the teaching in Chiodo, there would be nothing to motivate a person skilled in the art to incorporate the polymer actuators of Browne into Chiodo since they may not provide the same advantages as the shape memory material and may ultimately render Chiodo unsatisfactory for its intended purpose.

Furthermore, use of the polymer actuators in Browne requires different design considerations from use of the shape memory material in Chiodo. In Chiodo, the system will have a complicated thermal design whereas in Browne, the system will require electrical connections to the polymer actuators. Consequently, it would not be possible to substitute the shape memory material in Chiodo with the polymer actuators of Browne without dramatically changing the nature of the system in which it is placed.

The Patent Office is respectfully requested to reconsider and remove the rejections of the

Serial No.: 10/737,137  
Art Unit: 2617

claims 1, 3-22, and 24-27 under 35 U.S.C. 103(a) based on Chiodo in view of Mockridge, with or without Browne, Staniszewski, and/or Matsunaga, and to allow all of the pending claims 1, 3-22, and 24-27 as now presented for examination. An early notification of the allowability of claims 1, 3-22, and 24-27 is earnestly solicited.

Serial No.: 10/737,137  
Art Unit: 2617

Respectfully submitted:

Walter J. Malinowski July 18, 2006  
Walter J. Malinowski Date

Reg. No.: 43,423

Customer No.: 29683

HARRINGTON & SMITH, LLP  
4 Research Drive  
Shelton, CT 06484-6212

Telephone: (203)925-9400, extension 19  
Facsimile: (203)944-0245  
email: wmalinowski@hspatent.com

### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. BOX 1450, Alexandria, VA 22313-1450.

7-18-06 Ann Okrentowich  
Date Name of Person Making Deposit